

ISSUE DATE: April 17, 2000

DOCKET NO. E-002/M-99-1438

ORDER DETERMINING DECOMMISSIONING COSTS, APPROVING COST RECOVERY
PROCEDURES, AND ESTABLISHING FUTURE FILING REQUIREMENTS

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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Chair
Commissioner
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Commissioner

In the Matter of Northern States Power
Company's Petition for Approval of its 1999
Review of Nuclear Plant Decommissioning

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PROCEDURAL HISTORY

On October 1, 1999 Northern States Power Company (NSP or the Company) filed its triennial review of the projected costs of decommissioning its nuclear power plants and the status of existing decommissioning cost recovery accounts.

On December 1, 1999 the Department of Commerce (the Department) filed its report and recommendation. The Department recommended accepting the Company's report and approving its proposals, with one change. That change was to complete the recovery of decommissioning costs for the Prairie Island plant in 2007 instead of 2008, to reflect the Department's view that 2007 was when the plant was most likely to close.

On December 27, 1999 the North American Water Office (NAWO) filed comments in the case. NAWO urged the Commission to complete cost recovery for the Prairie Island plant in 2004, on the basis of three claims: (1) Minnesota law requires the plant to close no later than 2004; (2) NSP's attempts to secure out-of-state storage for nuclear waste stored at the plant, which could prolong its life, will prove futile; (3) sound public policy requires phasing-out nuclear power as soon as possible.

On March 16, 2000 the matter came before the Commission.

FINDINGS AND CONCLUSIONS

I. Factual Background

The Company's decommissioning cost estimates were prepared by an independent consulting firm, TLG Services, Inc. The firm is nationally known for its expertise in nuclear decommissioning and has been conducting NSP's triennial cost reviews since 1985. TLG estimated the Company's total decommissioning costs (in 1999 dollars) at \$958.2 million. Per-unit costs were as follows:

Monticello	\$368.5 million
Prairie Island Unit One	\$273.3 million
Prairie Island Unit Two	\$316.4 million

Total estimated costs were down by \$19.5 million from the last triennial study, mainly because TLG had decided that it was no longer necessary to add 16.5% to the labor costs of utilities which, like NSP, plan to act as their own Decommissioning Operations Contractor.

Closely related to decommissioning costs, and reviewed triennially during the same proceeding, are end-of-life fuel costs. These are the costs of the unburned nuclear fuel that will be in the reactors at shutdown. The TLG study estimated these costs at \$25,807,568 for Monticello and \$23,389,162 for Prairie Island, all in 1999 dollars.

Both decommissioning and end-of-life fuel costs are recovered from ratepayers in equal installments over the operating life of the plant; amounts collected are placed in a special fund for use at decommissioning. The Commission conducts triennial reviews such as this one to ensure that costs are being estimated as accurately as possible and that the fund is growing at the rate necessary to cover the eventual costs of decommissioning. The Commission approves specific annual recovery amounts, which are factored into rates at the next rate case.

The decommissioning and end-of-life fuel costs estimated by TLG in the 1999 triennial study translate into annual recovery amounts of \$25,001,688 for decommissioning and \$2,101,344 for end-of-life fuel. These amounts are slightly lower than the annual recovery amounts from the last triennial study – \$1,301,268 lower for decommissioning and \$446,064 lower for end-of-life fuel.

II. The Positions of the Parties

A. The Department of Commerce

The Department believed that the triennial study had been carefully and competently done and that it was appropriate to rely on its conclusions in determining how much money must be available for decommissioning. The Department recommended shortening the recovery period for the Prairie Island decommissioning fund by one year, however, on grounds that the plant was more likely to close in 2007, for lack of nuclear waste storage space, than in 2008 as the Company projected. The Department pointed out that NSP's most recent resource plan filing had assumed that Prairie Island would stop operating in 2007.

A. Northern States Power Company

NSP explained that it was committed to operating the Prairie Island nuclear reactors to the end of their license periods – 2013 and 2014 – if at all possible. It had used the 2008 shutdown date in this filing because that date had been approved in its last general depreciation filing and because it was close to the 2007 date on which it will run out of nuclear waste storage space under current conditions.

The Company emphasized, however, that it expected to find a way to solve the nuclear waste storage problem. In fact, it reported what it considered good progress on two fronts. First, it had negotiated a contract with the Skull Valley Band of the Goshute Nation to build a temporary nuclear waste storage facility on the Band's Utah reservation. Second, it continued to work with Congress on nuclear waste storage issues and believed comprehensive federal action was likely in the near future.

A. North American Water Office

NAWO urged the Commission to complete cost recovery for the Prairie Island plant in 2004, on the basis of three claims.

First, NAWO argued that Minnesota law requires the plant to close no later than 2004. This argument rests on NAWO's reading of the intent of the Commission and the Legislature in granting the Company a Limited Certificate of Need for its dry cask nuclear waste storage facility at the Prairie Island plant.

The Certificate limits the Company to 17 dry casks. When the Certificate was issued, the 17-cask limit seemed likely to force the plant to close in 2001. Since then, the Company has stretched the life of the plant to 2007 by slowing the rate at which the reactors burn fuel and by changing the designated site for any emergency full core off-load from the plant's main storage pool to the cask operations section of the storage pool.

NAWO challenges the change of the full core off-load site as inconsistent with the terms of the Certificate of Need. If NAWO were correct and NSP must indeed reserve space in the main storage pool for full core off-load, NSP would run out of storage space – and would have to close the plant – in 2004.

Second, NAWO argued that it would be imprudent to assume that NSP's attempts to site a nuclear waste storage facility outside the state would be successful or that its advocacy in Congress would bring it the relief it needs to keep the plant open. The Office pointed out that the Company's application to construct an interim storage facility on the Skull Valley Goshute reservation is embroiled in litigation and that its previous attempt to site a nuclear waste storage facility on an Indian reservation had failed in the face of similar pressures.

The Office also claimed that draft federal legislation introduced so far has focused on the United States assuming ownership of nuclear waste at reactor sites, not on transporting nuclear waste out of the state. The Company needs to move the waste out of the state to prolong the life of the plant.

Finally, NAWO argued that sound public policy requires phasing-out nuclear power as soon as

possible, because it poses grave public health and public safety risks.

III. Commission Action

A. Study Accepted

No one challenged the adequacy of the 1999 triennial study, the Company's estimate of total decommissioning costs, or any of the financial parameters of the decommissioning fund. The Commission, too, finds the study adequate, the estimated decommissioning costs reasonable, and the fund's financial parameters appropriate. The only remaining issue is the length of the recovery period for the costs of decommissioning Prairie Island.

A. 2007 Adopted as End Date for Prairie Island Recovery

The Commission agrees with the Department and the North American Water Office that it cannot assume that NSP will be able to begin removing nuclear waste from Prairie Island in time to avoid a 2007 shutdown.

The Company will run out of storage space for nuclear waste at the Prairie Island plant in 2007. There will clearly be no federal repository ready to accept the waste by then. The Company hopes to have an interim storage facility on the Goshute Skull Valley Reservation in Utah by then. At this point, however, the facility has not been licensed, the project itself is embroiled in litigation, and construction has not yet begun. This record does not support a finding that the Company will begin transporting Prairie Island nuclear waste out of the state before 2007.

Neither does the record support a finding that NSP's legislative advocacy will spur federal action permitting it to ship Prairie Island waste out of the state by 2007. As NAWO points out, much of the recent federal debate has focused on transferring ownership of the waste, not on transferring the waste. A change in ownership would not change the storage restrictions at Prairie Island.

Finally, the Commission's acceptance of the Company's last general depreciation filing, which set Prairie Island's end-of-service-life date at 2008, does not control here. General depreciation filings are general overviews of the Company's depreciation accounts; they are not designed to resolve the sorts of highly specialized issues for which the Commission has instituted triennial nuclear decommissioning reviews.

A. 2004 Date Rejected

The North American Water Office urged the Commission to set the end of the recovery period at 2004, mainly because NAWO read the Limited Certificate of Need as requiring shutdown in that year. (See the discussion of NAWO's position above.)

Since NAWO's filing, the Minnesota Court of Appeals has upheld the Commission's reading of the Limited Certificate of Need, which permits the Company to extend the life of the plant by changing the site of any full core off-load it might have to perform.¹ The Commission continues to believe, as it explained in the Order affirmed by the Court², that it is permissible for the Company to extend the life of the plant in this way.

As before, the health and safety concerns raised by NAWO are more properly directed to the federal Nuclear Regulatory Commission (NRC), the agency charged with ensuring the safety of the nation's nuclear power plants. The Commission will of course continue to monitor safety issues affecting Minnesota's nuclear plants, in part by continuing requirements in other dockets that NSP file detailed reports on any NRC proceedings which could affect the Company's waste management operations.

A. End-of-Life Fuel Cost Recovery Period to Match Decommissioning Recovery Period

Although the Department recommended adjusting the time period for recovering nuclear decommissioning costs to more closely match the Prairie Island plant's life expectancy, it did not view end-of-life fuel costs with the same concern. Although end-of-life fuel costs do not pose the same economic threat as decommissioning costs, the same principle – recovering total plant costs from the ratepayers who used the electricity the plant generated – applies. To be consistent, and to avoid burdening future ratepayers with both present and future costs, the Commission will adjust the recovery period for end-of-life fuel costs to end in 2007 as well.

A. Future Filings Required

Historically, the Commission has reviewed nuclear decommissioning cost estimates, cost recovery procedures, and fund accruals every three years. The three year interval remains appropriate, since cost estimates have stabilized over the past two filings, and since decommissioning is still seven years away. The Commission will therefore require NSP's next full nuclear decommissioning study by October 11, 2002.

In the intervening years, the Company should continue to file annual letters detailing accruals to the fund, the status of the fund, and Company efforts to monitor and address any risk of premature decommissioning. The Commission will treat these filings as informational only, unless parties or the Commission raise issues requiring resolution.

The Commission will so order.

ORDER

¹ In the Matter of the Application of Northern States Power Company for Approval of its 1998 Resource Plan, 604 N.W.2d 386 (Minn. App. 2000) *rev denied* (Minn. Mar. 28, 2000).

² In the Matter of the Application of Northern States Power Company for Approval of its 1999 Resource Plan, Docket No. E-002/RP-98-32, ORDER MODIFYING RESOURCE PLAN, REQUIRING ADDITIONAL WIND GENERATION, REQUIRING FURTHER FILINGS, AND SETTING STANDARDS FOR NEXT RESOURCE PLAN FILING (February 17, 1999).

1. The Company's 1999 triennial nuclear plant decommissioning filing is accepted and approved, with the modifications set forth below:
 - (A) the annual decommissioning accrual is set at \$26,740,020 effective January 1, 2000, based on end-of-life dates of 2010 for Monticello and 2007 for Prairie Island;
 - (A) the annual end-of-life fuel expense accrual is set at \$2,282,028, based on an end-of-life date of 2007 for Prairie Island;
2. On or before October 11, 2002 Northern States Power Company shall make its next triennial nuclear decommissioning filing.
3. In October 2000 and October 2001, Northern States Power Company shall make a letter filing detailing annual decommissioning accrual, decommissioning fund status, and Company efforts to monitor and address the risk of premature decommissioning.
4. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

(S E A L)

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